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THESIS

**THE GOVERNMENT PURCHASE CARD UNDER THE
FEDERAL ACQUISITION STREAMLINING ACT (FASA) OF
1994: A SMALL BUSINESS PERSPECTIVE**

by

Adorado B. Yabut, Jr

December 1997

Thesis Advisor:
Thesis Co-Advisor

James L. Kerber
Katsuaki L. Terasawa

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FEDERAL ACQUISITION STREAMLINING ACT (FASA) OF 1994:
A SMALL BUSINESS PERSPECTIVE**

Adorado B. Yabut, Jr.
Lieutenant, United States Navy
BBA, National University, 1986

Submitted in partial fulfillment of the
requirements for the degree of

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from the

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TABLE OF CONTENTS

I. INTRODUCTION.....	1
A. RESEARCH QUESTIONS.....	2
B. DISCUSSION.....	2
C. SCOPE OF THESIS.....	4
D. ASSUMPTION.....	4
E. METHODOLOGY.....	4
F. BENEFITS OF THE STUDY.....	5
G. ORGANIZATION OF THE THESIS.....	5
II. BACKGROUND.....	7
A. ACQUISITION REFORM.....	7
B. IMPAC CARD.....	13
C. SMALL BUSINESS.....	20
D. SUMMARY.....	27
III. CURRENT BUSINESS PROCESSES.....	29
A. IMPAC CARD.....	29
B. CARDHOLDERS.....	33
C. THE FREEDOM OF INFORMATION ACT (FOIA).....	34
D. INFORMATION TECHNOLOGY.....	36
E. FUTURE OF INTERNET-BASED COMMERCE.....	37
F. SUMMARY.....	38
IV. DATA PRESENTATION AND ANALYSIS.....	39
A. FLOWCHART.....	39
B. DATA COLLECTION.....	41
C. DATA ANALYSIS.....	49
D. SUMMARY.....	56
V. CONCLUSIONS AND RECOMMENDATIONS.....	57
A. CONCLUSIONS.....	57
B. RECOMMENDATIONS.....	59
C. ANSWERS TO RESEARCH QUESTIONS.....	61
D. AREAS FOR FURTHER RESEARCH.....	63
APPENDICES.....	65
APPENDIX A. DEFINITIONS.....	65
APPENDIX B. ACRONYMS.....	67
APPENDIX C. QUESTIONS TO CARDHOLDERS.....	68
APPENDIX D. FISCAL YEAR 1997 MICRO-PURCHASE DATA.....	69
APPENDIX E. FISCAL YEAR 1998 MICRO-PURCHASE DATA.....	70
LIST OF REFERENCES.....	71
INITIAL DISTRIBUTION LIST.....	73

I. INTRODUCTION

This research will evaluate the effect of recent government acquisition reforms on the small business establishment. Acquisition reform initiatives are streamlining the government procurement process and have greatly influenced how the government conducts business with the private industry. The Federal Acquisition Streamlining Act (FASA) of 1994 and the Government Purchase Card are key features of recent government initiatives to streamline the federal procurement process. Specifically, the thesis will identify and recommend business strategies that a small business concern can use to improve its opportunities for doing business with the government.

In making the acquisition process more responsive to customer requirements, the government enacted measures that altered the way government contracts are awarded. The Government Purchase Card enables non-procurement personnel to directly buy their own supplies. This increased the satisfaction of both the purchase cardholder and the customer or end user. Procurement regulations have been modified. As a result, the purchasing function is much easier to perform. No longer is the micro-purchase level reserved solely for the small business concern. Competition from the large business sector is now allowed. The changes in these market forces are shaping the way the commercial business establishment responds to meet government requirements. Essentially, the small business concern must now compete to a greater extent with the large business entity for

government contracts. To respond effectively, the small business establishment needs to reassess its business strategies to survive in this fiercely competitive market economy.

A. RESEARCH QUESTIONS

Primary Research Question

1. What strategies must a small business concern develop to receive government contracts?

Subsidiary Research Questions

1. What is the effect of the Federal Acquisition Streamlining Act (FASA) of 1994 and its initiatives, specifically the Government Purchase Card on the small business establishment?

2. What is the best way to match the cardholders and the small business establishment?

3. What steps can the government take to enable the small business establishment the opportunity to bid on government contracts?

B. DISCUSSION

In 1994, Congress enacted the Federal Acquisition Streamlining Act to make government purchasing easier and more responsive to customer demands. Government procurement regulations and business protocols were streamlined and modified. The Government Purchase Card was widely implemented and later mandated for use when

procuring goods and services. Use of the card is extended to the non-procurement staff within program offices. This effectively moves the actual purchase of goods closer to the end user.

As the Government Purchase Card program gained acceptance and wide popularity with the federal government, more cardholders are authorized to use the card. Under FASA, cardholders have the option of buying their requirements from a small or large business entity, as long as, the purchase cost does not go beyond \$2,500 which is the micro-purchase threshold. Otherwise, purchases which cost between \$2,500 and \$100,000 are considered as small business set-asides and reserved for the small business establishment. Realizing the impact of this new FASA initiative, some small business concerns are concentrating their marketing efforts towards these cardholders.

The government is moving towards electronic commerce. The Internet and computer applications like the Federal Acquisition Computer Network (FACNET) are making this possible. Electronic commerce provides for increased opportunities for business relationships with the government by providing wider access and increasing the level of competition. To succeed in this new environment of increased competition, the small business establishment needs to apply different marketing strategies than it had in the past.

C. SCOPE OF THESIS

This thesis will investigate appropriate business strategies that a small business concern can implement in their search for government contracts under FASA. The implementation of the Government Purchase Card, the new acquisition thresholds, and the government's emphasis on electronic commerce are new FASA initiatives which a small business concern must address.

D. ASSUMPTION

It is assumed that the reader is familiar with the federal acquisition process and the common terms associated with the contracting process. Specifically, the reader should be familiar with procurement regulations at the micro-purchase and the small business set-aside procedure at the Simplified Acquisition Threshold (SAT) level. To assist the reader, a list of definitions and acronyms used throughout this thesis is provided in Appendices A and B, respectively.

E. METHODOLOGY

This thesis will examine the business strategies that a small business concern can employ under FASA and the Government Purchase Card. A thorough review of FASA, and Executive Order 12931 was performed to understand the streamlining efforts of acquisition reform. Archival research on the Card, government buying preferences and selected interviews with government procurement officials, small business owners and

cardholders were used in responding to the thesis research questions. Furthermore, the analysis of 100 micro-purchase transactions and the simplified acquisition procedures (SAP) provided the purchasing foundation in understanding how the government purchases goods and services. Reviews of current purchasing journals, thesis work of former Naval Postgraduate School (NPS) students and the Internet provided additional information. The comprehensive collection and analysis of this information provided the foundation in developing the recommended business strategies.

F. BENEFITS OF THE STUDY

This thesis will recommend business strategies that a small business concern can implement in the present market environment. The recommended strategies will minimize the small business concern's marketing costs, and should assist the small business establishment in establishing a solid reputation built on a quality product and outstanding service. With both the large business sector and the small business establishment providing quality product and outstanding service to the purchasing staff, cardholders and customer end-users will be satisfied.

G. ORGANIZATION OF THE THESIS

This chapter discussed the purpose, the scope and the methodology of the research paper. Chapter II provides the background of acquisition reform, the card and the commercial small business establishment. Chapter III describes the current business processes involving the card, the cardholders, the Freedom of Information Act (FOIA),

the Internet and electronic commerce which are affecting the small business establishment. Chapter IV presents an overview of the micro-purchase and the small set-aside procedures up to the simplified acquisition threshold through the use of a flow chart. Micro-purchase procurement data was graphed and analyzed to identify the factors which influence the purchase. Finally, Chapter V provides recommendations and conclusions based on the analysis presented in Chapter IV.

II. BACKGROUND

In the past, the perception of government purchasing by customers was marked with excessive procurement guidelines, lengthy delays in procurement actions and unresponsiveness. Acquisition Reform was needed to streamline the government purchasing process. The Federal Acquisition Streamlining Act (FASA) of 1994 was enacted and the Government Purchase Card was introduced and widely implemented. These reform initiatives changed the way that the government buys goods and services. The procurement changes significantly influenced the business sector, specifically, the small business establishment.

A. ACQUISITION REFORM

1. Procurement Reform

For decades, the Federal Acquisition process has been characterized by tremendous amounts of time and effort being expended by large numbers of people following a myriad of rules and regulations (Slater, 1994). In 1980, the core procurement workforce employed by the government comprised about 42,000 personnel, rising to 67,000 in 1992. At the same time, the average productivity per contract specialist declined from \$9.4 million in 1980 (in 1992 dollars) to only \$6.3 million in contract costs in 1992 (NPR, 1993). Federal procurement purchases were heavily restricted by cumbersome regulations. Staff productivity diminished. The excessive procurement

guidelines and regulations have clearly placed a heavy burden on the government's ability to deliver federally procured supplies and services in a timely manner.

In the 1980s, the federal government, as compared to the private sector, was slow in its purchasing function. For purchases of less than \$25,000, the private sector can process their requirements and perform the procurement within four days while the federal government takes almost one month to perform the same activity. The disparity is greater for large purchases, those purchases over \$100,000 in value. The private sector can process the \$100,000 order between one to four weeks with an average of two weeks while the federal government requires at least three months. The government's inability to perform timely delivery of purchased goods and services is evident in the procurement of Information Technology (IT) products. Former Internal Revenue Commissioner Fred T. Goldberg observed that "what takes one year for the private sector to do, we (the government) are taking four to five years to do, and the half-life of this stuff is about a year." The length of time it takes the government to process and buy IT products stipulate that, by the time the product is in government hands, the government has paid a higher price for an item that is now old technology. The cumbersome bureaucracy required to support federal purchasing resulted in high administrative costs- over 7 billion dollars in salaries and benefits alone. Such inefficiency affected the timeliness, quality, and price of purchased goods and services. The federal procurement process, as observed by Mr. Goldberg, "was designed to fail" (NPR, 1993)

During that same decade, government acquisition was placed under closer scrutiny, particularly after the disclosure of several highly publicized federally procured items. Such over-priced items, which could have been commercially procured off the shelf at a much cheaper price, reflected the inefficiency of the federal procurement process. Faced with the specter of these scandals and more public inquisition, in 1985 President Reagan established, the Blue Ribbon Commission on Defense Management, otherwise known as the Packard Commission. The findings of this commission identified the same problems that previous federally sponsored acquisition studies have found in the past twenty years, as well as new ones (Slater, 1994). One of the 55 recommendations made by the Packard Commission to improve the procurement process was to streamline the entire Department of Defense (DoD) acquisition system. Included in the Packard recommendations was the introduction and use of the Government Credit Card in government purchasing (GAO, 1990).

During that same time period, Congress also conducted their own parallel studies to address these same procurement deficiencies. Their findings reiterated the need for acquisition improvement. Subsequent studies commissioned by the Bush administration and more recently, the Clinton administration confirmed the need to adjust the government procurement process. The recommendations by all of these independent studies became the baseline for federal acquisition reform in the following decade.

2. Federal Acquisition Streamlining Act of 1994

In 1993, the Clinton administration with Vice President Al Gore leading the efforts, released the National Performance Review (NPR), entitled, ‘From Red Tape to Results: Creating a Government That Works Better and Costs Less.’ This review criticized the federal procurement process, identified the same inefficiencies described in previous studies and provided corrective measures. A corrective measure espoused by the NPR was that of empowering non-procurement government employees to buy commercially available supplies and services. Again, the NPR reinforced the necessity to overhaul the federal procurement process.

With the general public showing disdain for the procurement process, Congress and the Executive branch passed into law the Federal Acquisition Streamlining Act (FASA) of 1994. FASA, also sometimes referred to as the ACT, was formulated to streamline the acquisition process and make it more responsive to customer needs and demands. Procurement regulations were modified to pull government purchasing in line with current commercial practices.

FASA and other procurement reform measures such as the Executive Order 12931 of October 13, 1994 guided the federal acquisition process in its transition to be responsive and more customer-focused. FASA made a number of changes in the way that goods and services at, or below \$100,000 are acquired. The ACT replaces the \$25,000 threshold with a new ‘Simplified Acquisition Threshold’ (SAT) of \$100,000 once an agency (or a procuring activity within the agency) achieves certain electronic commerce,

namely Federal Acquisition Computer Network (FACNET) capabilities, uses them and certifies that it has met the criteria. Until that time, the threshold is only increased to \$50,000” (NASA, 1997). The use of Information Technology (IT) in procurement is highly emphasized under FASA. Transactions are going to be performed mostly by electronic commerce. When in place, electronically capable agencies are exempt from publishing advance notices of purchases below \$100,000. The ACT reserves purchases above \$2,500 but below the \$100,000 SAT for the small business concerns. More importantly, FASA excludes purchases of \$2,500 or less (micro-purchases) from the small business reservation. Thus, it is possible for agency officials to make simplified purchases and credit card purchases. These micro-purchases do not have to be competed and are exempt from the Buy American Act. This has the effect of reducing order processing time which expedited the delivery of the requirement to the end user.

3. Executive Order 12931 of October 13, 1994

Under section 1 of Executive Order 12931 of October 13, 1994, there are notable recommendations which have made significant modifications regarding the way that the government buys its goods and services (Arnet, 1997).

- Section 1.(d) puts significant emphasis on the procurement of commercially available items. Past contractor’s performance is now closely monitored while best value rather than simply low cost is promoted in selecting sources for supplies and services.

- Section 1.(e) requires that simplified acquisition procedures are used to the maximum extent practicable for procurements under \$100,000 to reduce administrative and paperwork costs.
- Section 1.(f) expands the use of the Government Purchase Card by the agency and take maximum advantage of the micro-purchase authority provided in the Federal Acquisition Streamlining Act of 1994 by delegating the authority, to the maximum extent practicable, to the offices that will be using the supplies or services to be purchased.

Executive Order 12931 and FASA of 1994 emphasized the use of the Government Purchase Card. The changes in guidelines with respect to acquisition threshold levels have been significant in the awarding of contracts and the procurement of goods and services. Not only was the small purchase threshold increased from \$25,000 to a new Simplified Acquisition Threshold (SAT) of \$100,000, the deployment of the Government Credit Card to non-procurement personnel extended the procurement function. Thus, non-procurement officials at government agencies could buy their own goods and services provided that the total value of the purchase was less than \$2,500. As of October 1, 1997, all micro-purchase transactions (purchases less than \$2,500) are performed using the Government Credit Card, albeit, with limited exceptions. Furthermore, past contractor performance and the new emphasis on best value instead of lower price has considerably changed the way that government procurement officials award their contracts.

These changes streamlined the federal procurement process and altered the way the small business concerns obtain government contracts. Prior to FASA, a small business concern was initially considered in any procurement action before a large business entity. In those days, for purchases less than \$2,500, a contract was almost always awarded to a small business concern. After the implementation of FASA, the market share held by the small business establishment on micro-purchases is likely to diminish due to increased competition from the large business sector. According to FASA, a large business entity is now legally authorized to compete evenly with a small business concern at that micro-purchase threshold. As a result, the small business concern now has to aggressively market itself to regain the same share of government contracts.

B. IMPAC CARD

1. Purpose

In September, 1986, the Department of Commerce, acting on behalf of the Office of Management and Budget (OMB), and under the authority of Executive Order 12352, "Procurement Reform" sponsored a pilot program whereby small purchases could be paid with a Government Credit Card (Slater, 1994). The Government Credit Card was intended to streamline and improve the small purchase procurement process. The card is to be used as a simplified procurement method.

The General Services Administration (GSA) was tasked by OMB with developing a credit card program for the entire Government. The Rocky Mountain Bank Card

System (RMBCS), a subsidiary of Colorado National Bank (now, First National), won the initial competitive bid in 1988 and has been successful in retaining the program in subsequent years. The contract award provided Visa cards for the entire Government, with the cards guaranteed for a year and an annual renewal option for four subsequent years. The last competitive solicitation and award was in February 16, 1994. Again, RMBCS was awarded the fixed-price requirements type (GS-23F-9403) contract. In 1998, GSA will open the Government Credit Card contract for competition.

The credit card is officially known as the International Merchant Purchase Authorization Card (IMPAC). Intended solely for official government use, the card is used to purchase goods and services commercially available and ready for delivery. The cardholder is the only person authorized to use the card and the card can not be used for his personal use. Cardholders are restricted on the amount of a single purchase order and a monthly total purchase limit. Spending limits and supervisory oversight are management controls placed on the cardholder and the program.

Participation in the IMPAC program does not relieve the cardholder from complying with established rules and regulations in the Federal Acquisition Regulations (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), and Service-specific acquisition regulations. Specifically, IMPAC use must be consistent with FAR, Part 8 concerning the use of mandatory sources of supply (NAVSUP 4200.85C). Mandatory sources of supply are government required sources of supply which include the Federal Supply Schedules (FSS), Federal Prison Industries (FPI), National Institute for the

Blind or National Institute for the Severely Handicapped (NIB/NISH) and others. Furthermore, all applicable rules in the FAR, Part 13 concerning small purchases, especially those concerning the need to obtain adequate competition, must be strictly observed. If an item or service is not available through the required sources, the cardholder must then deal with small business concerns (FAR 13.105).

The success of a pilot program for the use of the purchase card at the National Oceanic and Atmospheric Administration (NOAA) led the Deputy Assistant Secretary of Defense for Procurement to authorize the use of the card throughout the Department of Defense . (DoD) (RMCBS, undated). The Naval Supply Systems Command (NAVSUP) followed by implementing the credit card program at all Department of the Navy (DoN) activities in 1989. That same year, Commander, Navy Accounting and Finance Center outlined the primary goals of the credit card program:

- streamline payment procedures and reduce administrative costs for acquisition of supplies and services under \$25,000;
- improve Government cash management practices, e.g., forecasting, consolidating payments, reducing imprest funds, etc., and
- provide procedural checks and feedback to improve management control.

2. Purchasing Threshold

At the beginning of the program in 1989, access to the purchase card was held solely by the purchasing staff. Even then, only a small number of the procurement staff within the Supply department were authorized to use the card. With FASA in 1994 and

then, the Federal Acquisition Reform Act (FARA) of 1996, the card began being disseminated widely and is now available for use by non-procurement staff. They are now authorized to buy their own goods and services using the credit card at the micro-purchase threshold of \$2,500 or up to their monthly limit which in most cases, is \$20,000. Even the card's purchasing authority has been raised. When the small purchase threshold (\$25,000) was replaced with the \$100,000 Simplified Acquisition Threshold (SAT), the card was subsequently approved for use by procurement personnel up to the \$100,000 threshold. The increase in the number of personnel using the card, plus high level governmental support made the card the preferred method in purchasing goods and services, specifically at the micro-purchase threshold.

3. Card Program Growth

Use of the credit card throughout the Government has grown steadily since its initial inception. In his thesis work on the IMPAC card, Slater found that from 1989 to 1993, more than 59,000 credit cards were issued throughout the government. Almost 2.7 million purchase transactions were performed, the total amounted to \$681.9 million, with an average daily sales level of \$1.7 million. The average purchase price of items obtained with a credit card from 1989 to 1993 was \$250.

Figure 1 shows the major users of the IMPAC card from 1989 to 1993. In that period, the total purchases using the card amounted to \$681.9 million. The DoD spent \$338.3 million and accounted for almost 50 percent of the total sales volume in this four year period.

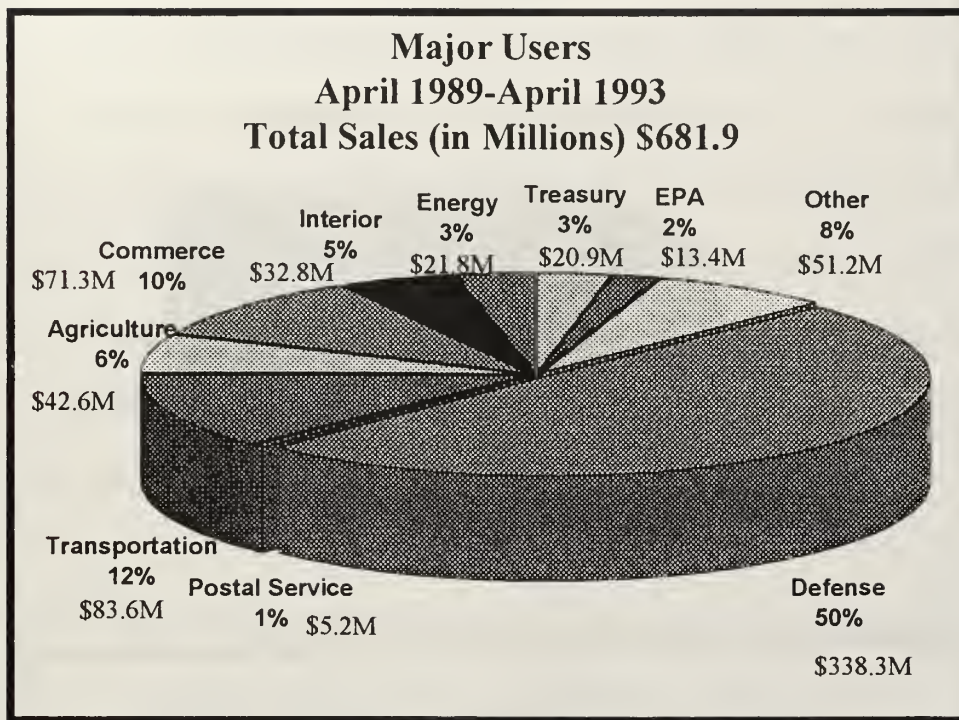


Figure 1. IMPAC Sales Figures (April 1989-April 1993)

In the future, GSA predicts more utilization of the card because of the mandate to use it as the primary simplified procurement method. Figure 2 illustrates the continuing growth of the IMPAC program. The number of credit card transactions continue to rise. In FY 94 alone, there were 2.4 million actual transactions or 18% of the potential transactions were performed through the credit card. For FY 97, the number of card transactions is estimated to be 10.5 million, roughly representing 75% of the potential transactions, a remarkable increase in card utilization (GSA, 1997).

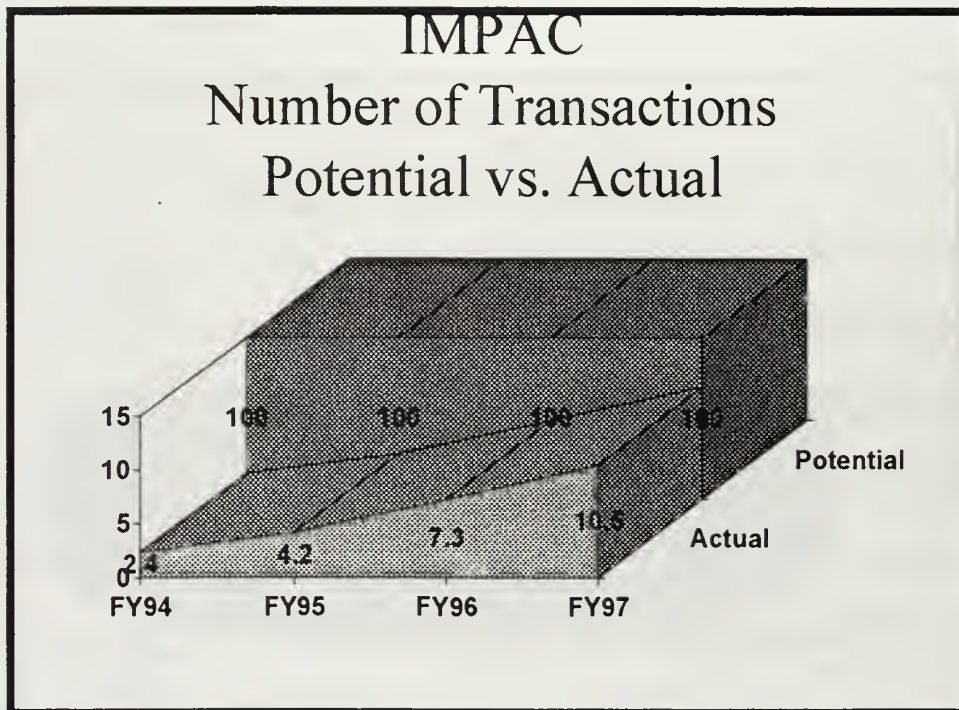


Figure 2. Number of Transactions: Potential vs. Actual

More and more government agencies and DoD activities are implementing the card program. For FY 98, Naval Hospital San Diego and FISC San Diego are increasing the number of non-procurement personnel authorized to use the card and are increasing the number of cards deployed in their respective commands. GSA estimates that the \$700 million in savings realized since the program's inception in 1989 will continue to rise. A 14 percent reduction in administrative costs associated with procurement and increasing customer satisfaction are convincing numerous government agencies and DoD activities to participate in the program.

In 1989, just 10,000 federal employees and military service members held the government credit card. Now, more than 250,000 civilians and service members use the

IMPAC card. The positive trend indicates the increasing acceptance of the Government credit card program and its wide spread use in procuring supplies and services. The number of transactions rose from 2.4M in FY-94 to 10.5M in FY-96. The average credit card purchase rose from \$250 (1989-1993) to \$300 (1994) up to the current \$340 (1996). The exceptional growth of the program is illustrated by figure 3. Figure 3 combines all of the IMPAC transactions and expresses them by dollars. From the onset of the program in FY 89 to FY 96, the dollar amount has steadily increased from \$460,612 to \$2,914,368,602 (Laurent, 1997).

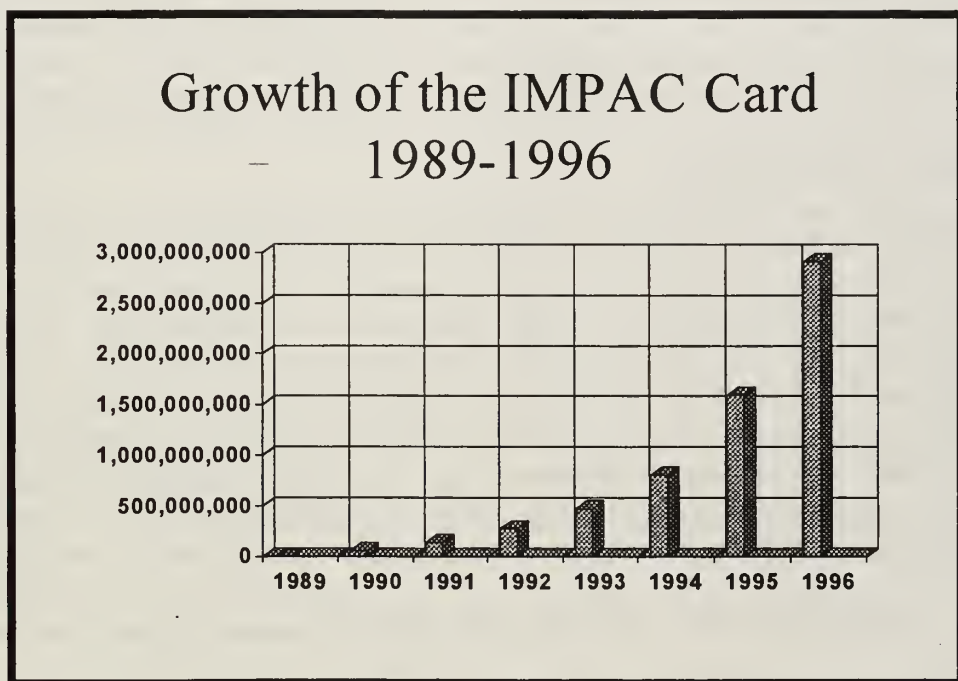


Figure 3. The Growth of the IMPAC Card (1989 to 1996)

C. SMALL BUSINESS

1. Definition

A small business concern is a commercial business organization, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria and size standards as outlined by 13 CFR Part 121. A concern is a business entity organized for profit (even if its ownership is in the hands of a nonprofit entity) with a place of business located in the United States and which makes a significant contribution to the U.S. economy through payment of taxes and/or use of American products, material and/or labor, etc. The concern can be an individual, a partnership, a corporation, a joint venture, an association, or a cooperative.

A small business concern is one that is not dominant in its field of operation in that it does not exercise a controlling or major influence on a national basis. Factors in determining dominance in a field of operation includes: volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity (FAR 19.001). As well, small business concerns include those that are considered disadvantaged and women-owned.

2. Small Business Act

The Government is held by law to provide maximum practicable opportunities in its acquisitions to small business concerns. The Small Business Act (15 U.S.C. 631, et seq.) applicable sections of the Armed Services Procurement Act (10 U.S.C. 2302, et seq.), the Federal Property and Administrative Services Act (41 U.S.C. 252), and Executive Order 12138, May 18, 1979 are federal regulations enacted into law in support of the small business sector (FAR 19.000). A specific government agency like the Small Business Administration (SBA) exists to assist small business concerns and contracting personnel in ensuring that a fair proportion of commercial and government contracts for supplies and services is placed with small business establishments. The Small Business Act specifies that the Office of Small and Disadvantaged Business Utilization Specialist (SADBUS) is established at each contracting activity. The SADBUS serves and acts as an advocate for the small business program as the contracting activity solicits and awards government contracts. Procurement regulations like the FAR, specifically, FAR 19.201 is precise in defining the responsibilities of the Heads of contracting activities in the effective implementation of the small business programs within their activities and the achievement of small business' program goals.

3. Small Business Set-Aside

A small business' program goal revolves around "set-asides for small business." The purpose of small business set-asides is to award acquisitions between \$2,500 and

\$100,000 exclusively to small business concerns. A set-aside is reserved for small business concerns, and unless, a small business concern can not reasonably perform or deliver the required goods and services, the contract is, in most cases, always awarded to a small business concern. Prior to FASA, a purchase order of \$10,000 but less than \$25,000 was reserved for a small business concern and is termed a small business set-aside. The SADBUS must agree and dissolve the set-aside if the contract is not going to be awarded to a small business concern. Under FASA, the same set-aside program is still enforced, only at different spending levels. Each acquisition of supplies and services that has an anticipated dollar value exceeding \$2,500, but not over \$100,000, is automatically reserved exclusively for the small business establishment, unless the contracting officer is unable to obtain offers from two or more small business concerns that are competitive with market prices and with regard to the quality and delivery of goods and services being purchased (FAR 19.502-2).

4. FASA Initiatives

Acquisition reform initiatives like FASA brought changes in the way government procurement offices buy from small business concerns. Before FASA, contracting regulations stipulated that for purchases of less than \$2,500, small business establishments were preferred over the large business sector. Today, with the enactment of FASA, and with the emphasis on accessibility and delivery of the required goods and services, that requirement no longer exists. Nowadays, at the micro-purchase level, the large business sector and the small business establishment are considered equally during the awarding of

the contract. FASA made it possible for the large business entity to compete with the small business concern at the micro-purchase level. Therefore, a cardholder is not required to buy from a small business concern if the purchase is less than \$2,500. Neither the small business concern nor the large business entity receives preference at the micro-purchase threshold. As long as the cardholder determines that the price is reasonable and meets his requirement, the cardholder can purchase the goods or services from either a large or a small business entity. Best value and past contractor performance are critical performance factors now considered when awarding purchasing contracts. These changes in procurement regulations have the effect of forcing the small business concerns to reassess their marketing strategies in order to continue to compete at their previous levels.

5. Small Business Conference/Procurement Fair

In August 1997, RADM Mike Sullivan, Supply Corps, USN, at a Small Business Conference sponsored by the Naval Postgraduate School, Monterey, CA, stated that, in FY 96, the small business establishment received \$45.2 billion in government contracts out of the \$132.2 billion in DoD contracts awarded for that fiscal year (Figure 4).

FY 1996 DOD Small Business Awards

Awarded by
DOD Contracting
Offices

\$25.4B

Total in 1996

\$45.2B



Awarded by
DOD Prime Contractors
\$19.8B

Figure 4. FY 1996 DoD Small Business Awards

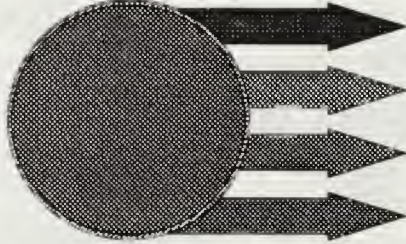
Furthermore, the Department of the Navy solicited and awarded the small business establishment \$9.3 billion (25%) in contracts of the \$37.7 billion that the Navy spent in contracting for goods and services (Figure 5). Of the \$9.3 billion in the DoN Small Business awards, \$1.8 billion were small business set-asides from the Prime Contractors. Figure 6 shows the number of contracting transactions and the dollar amount that the DoN awarded for FY 96. With the small purchase threshold of \$25,000 still in effect during FY 96, Figure 6 illustrates that 75,320 contracting actions over \$25,000 in purchases totaled \$35.4 billion. The data indicate that in government contracting, there are substantial Navy purchases that are less than \$25,000 and that the contracting actions account for \$2.3 billion of the overall \$37.7 billion that the Navy buys. Admiral Sullivan

also stated that the Navy expects an additional 44,000 procurement actions due to the increase in SAT. Overall, the number of contracting actions for high valued (over \$25,000) contracts is only 6% of the total contracting actions. In these high-valued contracts, large Prime contractors are almost always the winners. Still, the small business concerns are able to receive some of this government business. As shown under figure 4, DoD Prime contractors subcontracted \$19.8 billion of their government business to the small business concerns (Sullivan, 1997).

Although the Navy anticipates awarding an additional \$2 billion of government contracts to the small business establishment because of the increase in SAT, the large business sector might take a substantial piece of government awards at the micro-purchase level. Further analysis of figure 6 shows that of the 1,307,042 contracting actions that the Navy performed in FY 96, 1,231,722 contracts were valued at less than \$25,000. A majority of the Navy transactions were considered small purchase awards, but the total of those awards is minuscule compared to those above \$25,000. Most small business concerns conduct government transactions at the small purchase threshold. Now, with large business entities competing evenly at the micro-purchase threshold, the small business concerns are in danger of losing a substantial share of government contracts. The small business concerns are aggressively marketing themselves to the different contracting activities so that they get the same company and product exposure as the large business. More and more small business concerns are contacting the individual cardholders so that they can introduce their products and continue to receive government contracts.

FY 1996 Navy Small Business Awards

**Total Contracts Award
\$37.7B**



- \$9.3B in Small Business Awards (25%)
 - \$7.0B Prime Contracts
 - \$5.2B Open Competition
 - \$1.8B Small Business Set-Asides
 - \$2.3B Subcontracts

Figure 5. FY 1996 Navy Small Business Awards

Department of the Navy Contracting Fiscal Year 1996

- Number of Contracts

– Under \$25,000	1,231,722	94%
– Over \$25,000	75,320	6%
• TOTAL	1,307,042	100%
- Dollars

– Under \$25,000	\$ 2.3B	6%
– Over \$25,000	\$35.4B	94%
• TOTAL	\$37.7B	100%

Figure 6. FY 1996 DoN Contract Awards

D. SUMMARY

This chapter discussed the effects of new legislation for acquisition reform such as FASA and Executive Order 12931. The implementation and growth of the Government Purchase Card made government purchasing faster and more responsive to customer needs. These acquisition reform initiatives changed the way government buys goods and services from the business sector. Acquisition reform allowed the large business sector to compete with the small business establishment at the micro-purchase threshold. This affected the small business establishment significantly because of the changes in micro-purchase procurement and the small business set-aside requirements. The following chapter discusses the current business practices influencing the small business establishment.

III. CURRENT BUSINESS PROCESSES

This chapter discusses the current business processes such as the Government Purchase Card, the Freedom of Information Act (FOIA) and information technology which are affecting the business establishment, more specifically, the small business concern. Use of the Government Purchase Card is on the rise. In search of more government contracts, information regarding the cardholders themselves is solicited by the small business concerns through the Freedom of Information Act (FOIA). Business transactions are conducted through electronic commerce. The Internet is becoming a primary means for conducting government business.

A. IMPAC CARD

In streamlining the federal procurement process, the credit card was introduced as another small purchase procedure to make government purchasing easier and faster. Used as an alternative small purchase procurement method, the card reduced order processing time to two hours instead of the usual six hours spent when ordering through the traditional purchase order. Follow-on GAO cost benefit studies showed that government agencies saved an average of \$54 per transaction when using the Card instead of a purchase order. By 1992, Swain established that the card was becoming more accepted. His research showed that commercial vendors preferred the credit card as their second choice behind BPA but above purchase orders (DD 155) and Imprest Fund (Swain, 1992).

Use of the credit card within the federal government and DoD continues to rise. Initially, the Navy was the most active service using the commercial credit card program. However, by FY 91, the Army surpassed the Navy in use of the card in terms of dollars expended. In FY 96 alone, the Army used the IMPAC to make 74 percent of its micro-purchases, putting more than \$700 million on the purchase cards. For FY 97, the Army set a goal of using IMPAC for 80 percent of its 2.2 million to 2.4 million micro-purchases and is going to exceed their target, achieving 90.8 percent of its micro-purchases as of June 1997 (Laurent, 1997). The Navy's purchase card use also continues to grow (Figure 7). In fact, the Navy has matched the Army's goal of 80 percent in terms of buys made with the purchase card. As of July 1, 1997, 76% of all DoN's micro-purchases were bought with the card (NAVSUP, 1997).

Purchase Card Stats			
	Cardholders	Transactions	Sales
As of May 1997	17,585	653,500	\$318 million
As of June 1997	18,145	763,300	\$372 million
As of July 1997	18,790	876,373	\$429 million
Afloat Stats			
	Cardholders	Transactions	Sales
As of May 1997	888	2,187	\$1,129,283
As of June 1997	1,009	2,431	\$1,172,972
As of July 1997	1,100	3,134	\$1,600,000

Figure 7. Purchase Card Statistics

Within the past decade, government requirements have changed. The federal government is buying more services than goods. Figure 8 shows that in a span of five years, federal procurement shifted from product procurement to service contracting. Figure 9 is the Federal Procurement Report for FY 95 which breaks down the procurement actions into different categories. Figure 9 shows that 6% or 762,556 of 12,395,133 procurement actions were purchases between \$2,500 and \$100,000, the current small business set-aside threshold. Also, it also shows that the Purchase Card actions for that period accounted for 13%. Transforming the FY 95 non-schedule micro-purchases to present micro-purchase regulations implies that at least 59% of those procurement actions would have been performed through the Purchase Card in FY 95. Current data indicate that the IMPAC card is used in at least 75% of potential transactions (Figure 2).

Ten and even five years ago, federal procurement spending emphasized acquisition of products , with contracting services a distant runner-up. But product procurement has been plummeting in tandem with the Pentagon's precipitously declining weapons budget. And services have been surging. In fiscal year 1994, services contracting accounted for 49% of overall federal acquisition, and product spending, just 36 percent. That's almost an exact reversal of the shares these two categories claims in 1989. R&D spending accounted for 15 percent in 1994, down from 17 percent in 1989. (Shoop,1995)

Services Contracting Achieves Dominance

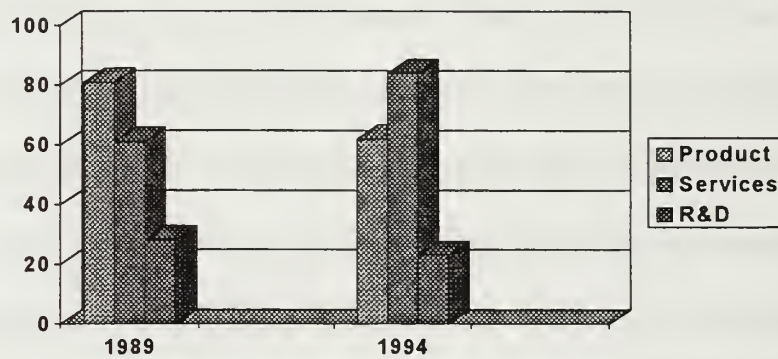


Figure 8: Services Contracting Achieves Dominance

Federal Procurement Report FY 1995 Total Procurement Actions 12,395,133

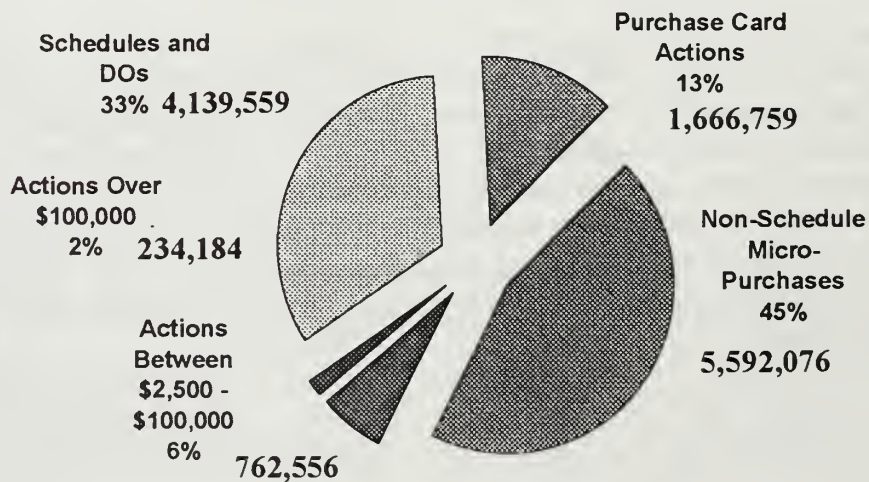


Figure 9. Federal Procurement Report FY 1995

B. CARDHOLDERS

The deployment and proliferation of the card in purchasing goods and services reflect the number of cardholders authorized to buy goods and services. FASA enabled non-procurement officials to have access to the card and be authorized cardholders. To be an authorized cardholder, a government employee must receive training and orientation on the local card program's operating procedures. Previous purchasing experience is desirable but is not a requirement to be a cardholder. With varying levels of purchasing expertise, cardholders are not expected to have specific commodity expertise when buying goods and services. A commodity expert is intimately familiar with the commodity itself, as well as, with market conditions regarding price and previous contractor performance. Expertise is gained through prior interactions with vendors and purchase solicitations. More cardholders are now found outside the Supply or the Contracting department rather than within those department. The number of cardholders continue to grow, from 10,000 in 1989 to more than 250,000 in 1997. As a result, credit card transactions also rose, from 16 percent of government transactions in 1996 to 31 percent the following year (Laurent, 1997).

The sudden increase in the number of cardholders and the sheer volume of credit card transactions are influencing the marketing efforts of commercial businesses attempting to maintain a share of the government market or enter into the government market. In search for more government contracts, the business sector, specifically the small business establishment, is making phone calls to these cardholders to market their

products and hopefully, consummate a business transaction with the government. Sometimes, a representative of a small business concern stops by to talk with a cardholder. Although these can be effective marketing strategies, the question still arises, whether the small business concern which has limited financial resources is receiving the maximum return for their efforts. Are the cardholders the appropriate target for their marketing efforts? Or is there someone else, aside from the cardholder, who contributes directly or indirectly to whom a government contract is awarded?

C. THE FREEDOM OF INFORMATION ACT (FOIA)

Another strategy used by the business establishment in soliciting government contracts is through the Freedom of Information Act (FOIA). Through FOIA, any business establishment can request the names of the cardholders and find out what the contracting agency is paying for a product. The FOIA, (5 U.S.C. 552) enables individuals to secure records from a Federal agency unless the information is protected from release by certain exemptions. Small business are citing the FOIA in their requests to access cardholders' names. In compliance, government agencies are providing the requested information, aware that once in possession, the business establishment will call these cardholders to make their marketing pitch in hopes of obtaining more government business. Government agencies are concerned that these phone calls, or even the occasional visit from a representative of a small business concern, will occupy the cardholders' time and interfere with his or her daily job functions. Smart and prudent

business establishments are quick to realize that not all cardholders are going to buy products from their companies. Finding who among the cardholders buy their products will reduce their marketing costs and time since cardholders are located all throughout each government activity. Ms. P. Mitchell and Ms. J. Baldino, co-located authorized cardholders from Naval Postgraduate School, stated that “they sometimes receive more than two packets of brochures from the same small business concern” (Baldino, 1997). These are preventable marketing expenses which a small business concern can avoid by implementing the appropriate marketing strategy.

Within a contracting activity, the SADBUS is established as the proponent of the small business establishment and will respond to inquiries from the small business establishment. The SADBUS is an information resource who can be tapped to gain insight on what the contracting activity buys. The SADBUS can match a cardholder with a product available in the market place. The SADBUS has to agree for a small business set-aside to be dissolved. Dissolving the set-aside usually means awarding the contract to a large business entity instead of a small business concern. The SADBUS’ function is strategically beneficial to the small business establishment since the SADBUS gets a sense of the marketing orientation of the contracting activity. Getting as much information from the SADBUS on the activity’s buying tendencies and purchasing staff is one way for businesses to more efficiently direct their marketing efforts, most specifically, the small business concern.

Again, the emphasis is placed ultimately on targeting activity cardholders. The question still arises as to whether cardholders are appropriate targets for their marketing efforts. Is that strategy cost-effective to the small business concern?

D. INFORMATION TECHNOLOGY

The Government in its efforts to continue to streamline the procurement process is emphasizing the use and application of information technology. Electronic commerce and electronic data interchange is assisting the federal procurement process as it transitions to a paperless commercial transaction. FASA of 1994 created the Federal Acquisition Computer Network (FACNET) which came on line July 15, 1995. FACNET is an all electronic means of doing business between the federal government and its suppliers. Through electronic data interchange, government business transactions can be performed electronically. Vendors can also get paid electronically. When paying vendors using the IMPAC card, the speed of payment offsets the discount rate placed on the card. The costs to the vendors of taking the IMPAC card averages 3% on FACNET (Sidereal, 1997). Conducting business transactions electronically is not cheap. Business entities need to determine and weigh the costs, benefits and their ability to handle the volume of commercial transactions before embarking into electronic commerce. Well established small business concerns which are adept with electronic commerce benefit from increased orders as they become more comfortable with this new way of doing business. Government agencies are required to place purchases above \$25,000 through FACNET.

FACNET will give the purchase solicitation nationwide visibility. However, businesses that have enjoyed profit margins above industry norms, simply because of lack of competition in the federal arena, may find that use of FACNET will increase competition and thus force them to lower their margins.

E. FUTURE OF INTERNET-BASED COMMERCE

Computers and their applications are today's preferred instruments when performing business transactions. Use of information technology by the government and the private sector continues to escalate. The power of the Internet grows as more government agencies are creating web pages for access, visibility, and conducting electronic commerce. Most government agencies like the General Services Administration (GSA), the Small Business Administration (SBA), the Naval Supply Systems Command (NAVSUP) and Fleet and Industrial Supply Center (FISC), San Diego maintain Internet home pages for easy access to information relating to their particular agency. Even the Commerce Business Daily (CBD) is now on-line. Dr. John Hamre, USD, in his memorandum dated May 21, 1997, "Moving to a Paper-free Contracting Process by Jan 1, 2000" signals the defense establishment's commitment to electronic commerce and the Internet. FACNET is paving the way for DoD's commercial transactions on the information highway.

Already, private enterprise and the government are into the information age and electronic commerce. The key to the information highway is the computer. Using

computers, a business transaction is literally only a keystroke away. With so much information readily available and accessible through the Internet, business entities are likely to find more opportunities by having on-line connection. In fact, some business entities are exploring access to the information highway and is transforming that access to a competitive edge in the market.

F. SUMMARY

This chapter discussed the current business processes which are affecting the small business establishment. The IMPAC, FOIA, information technology and the Internet are changing the way the government buys goods and services. The following chapter discusses the micro-purchase and small business set-aside procedures within the simplified acquisition threshold. Micro-purchasing data will be analyzed to identify marketing strategies which can be pursued by the small business establishment in the highly competitive commercial environment.

IV. DATA PRESENTATION AND ANALYSIS

This chapter discusses micro-purchase and small business set aside procedures within the simplified acquisition threshold. A flow chart illustrates and provides a general overview of how each procurement process is performed. It also discusses the method used for data collection. Graphs were created to facilitate analysis of the information and understanding of both procurement methods.

A. FLOWCHART

The present procurement process is the result of numerous changes brought by acquisition reform. The flowchart, Figure 10, is a simple representation of the current government procurement process from the micro-purchase up to the simplified acquisition threshold. The first step in the procurement process is the initiation of a purchase request by the requestor. Purchasing information provided by the requestor in the requisitioning document includes but is not limited to, the product name, product specification, the suggested source, and the purchase price. The total amount of the purchase order determines whether the purchase order is either a micro-purchase or a small business set-aside transaction. Performance of micro-purchase or a small business set-aside transaction is governed by separate and distinct regulations. Competition is not required when performing micro-purchases. This gives the large business sector equal consideration with the small business establishment during the award phase. At the small business set-aside threshold, full and open competition between small business concerns is mandated, unless

the purchase is exempted by certain contracting regulations. At a minimum, the competition requirement is satisfied when at least two small business concerns vie for the contract. In most cases, the purchasing staff will solicit bids from three small business concerns to satisfy this requirement.

Significant decision makers shown in the flow chart are the requestors and the cardholders in the micro-purchasing transaction while the purchasing agent and the SADBUS influence the small business set-aside procedures. These decision makers directly or indirectly influence the awarding of the government contract. The procurement process is considered complete once a government contract is awarded to the appropriate business entity. Awarding of a contract is facilitated by placing an order using any of the simplified procurement methods such as the IMPAC card or the DD 1155.

Flowchart of Simplified Acquisition Procedures

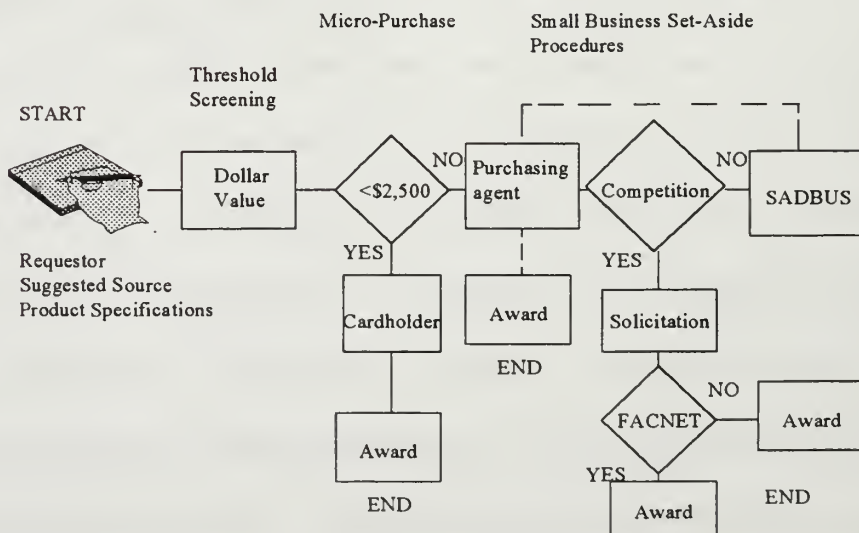


Figure 10. Flowchart of Simplified Acquisition Procedures

B. DATA COLLECTION

A total of 100 procurement files from a single cardholder were randomly retrieved. The purchasing records were comprised of fifty micro-purchase transactions from FY 97 and FY 98. For additional clarification, related follow on questions were posed to the cardholder (Waskow, 1997) to gain a better perspective on how purchasing decisions were made. Additionally, another cardholder (Copeland, 1997) , a small business concern (Iantorno, 1997), and selected requestors (Robinson, 1997), (Young, 1997) were randomly interviewed. The interviews served to assess and compare the findings obtained from the data.

Purchase transactions from GSA, sole source, small business set-aside dissolution or other FAR exempt purchases were not considered and are not included in the data. At the micro-purchase level, emphasis was placed on how many of the purchase transactions were awarded to the primary source suggested by the requestor, the size of the business that received the contract, and the type of requirement, a product or a service.

Purchasing data for the small business set-aside threshold was not obtained since current procurement regulations dictate that competition between small business concerns be held prior to award of a government contract. Therefore, the award will always be competitively solicited unless the requirement fall under the exemptions identified in the FAR. Also at that threshold, the IMPAC card is used more as a payment mechanism than as a simplified procurement method. This is markedly different at the micro-purchase

level where the IMPAC card is used both as a simplified procurement method and a payment mechanism.

The micro-purchase data contained in Figure 11 indicate that in FY 97, 50 out of 50 micro-purchase transactions or government contracts were bought from the suggested source by the cardholder. Furthermore, the purchases were obtained from 39 business establishments, 25 were large business entities while 14 were small business concerns. Of the 50 micro-purchase transactions, 31 micro-purchase orders were awarded to the large business sector and 19 micro-purchases were awarded to the small business concerns. The data shown in Figure 12 (FY 98) is very similar to the previous year. Forty-nine of 50 micro-purchases were procured from the suggested source. There were 25 large business entities and 15 small business concerns which sold the needed requirements to the government. The large business sector received 34 government contracts while the small business concerns received 16 micro-purchases. Both groups of data indicate that the source suggested by the requestor almost always receives the award. The data represent the requirements which were ordered by the cardholder which satisfied the requestor's need. Forty nine out of the 50 purchased requirements were products (PROD) instead of service (SVC). The FY 97 and the FY 98 data are almost identical. Most of the graphs which were developed used FY 97 data.

Business	Suggested Source		Business Size		Awards		Requirement	
TOTAL	YES	NO	LARGE	SMALL	LARGE	SMALL	PROD	SVC
50	50	0	25	14	31	19	50	0

Figure 11. FY 1997 Purchasing Data

Business	Suggested Source		Business Size		Awards		Requirement	
TOTAL	YES	NO	LARGE	SMALL	LARGE	SMALL	PROD	SVC
50	49	1	25	15	34	16	49	1

Figure 12. FY 1998 Purchasing Data

Figure 13 is a graphical representation of the FY 97 fifty micro-purchases which illustrates the 39 business entities with the number of purchase awards they received. The letters S and L were used to distinguish between a large and a small business concern. Additionally, the business entities were numbered consecutively to differentiate one from the other. The figure shows that the highest number of government awards received by a business entity was three. Only two business entities received three awards. The two business entities are small business concerns and are identified by the letters S1 and S2.

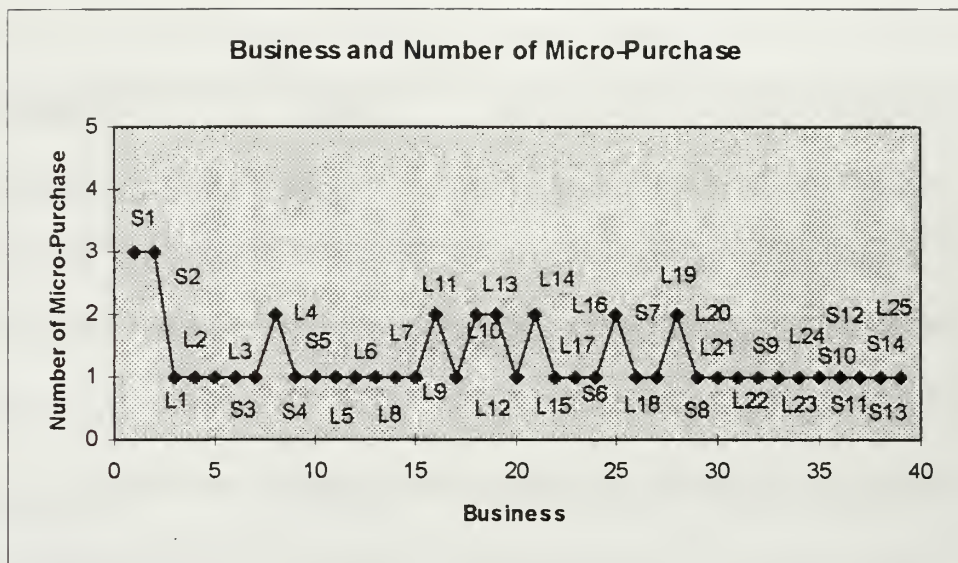


Figure 13. Graph between awards and business entity

Next, the business entities were separated according to size, large or small business concerns, and their performances were graphed. Figure 14 shows the performance of the large business sector while Figure 15 reflects only the small business concerns. The data points reveal that for both the large and the small business concerns, a majority received one government micro-purchase transaction. The highest number of contracts awarded to a large business entity was two. Six large business entities received the contracts. For the small business establishment, three micro-purchase contracts were the highest. Additionally, two small business concerns received an equal number of contracts.

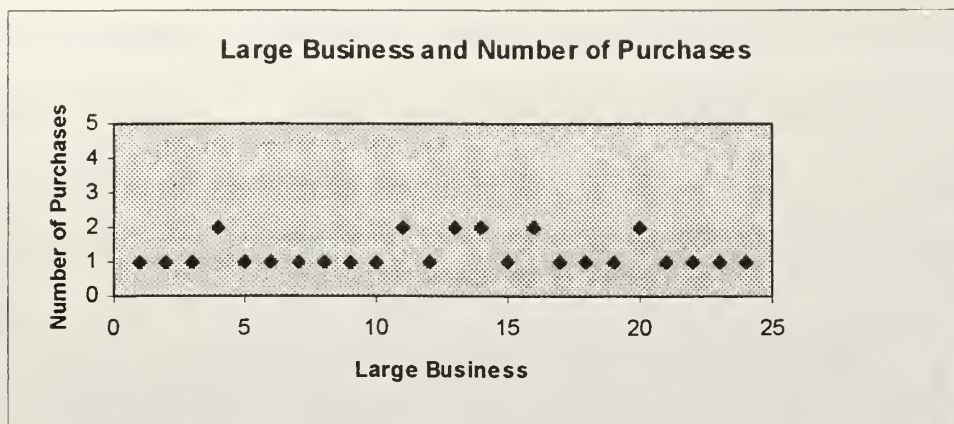


Figure 14 Large Business Performance

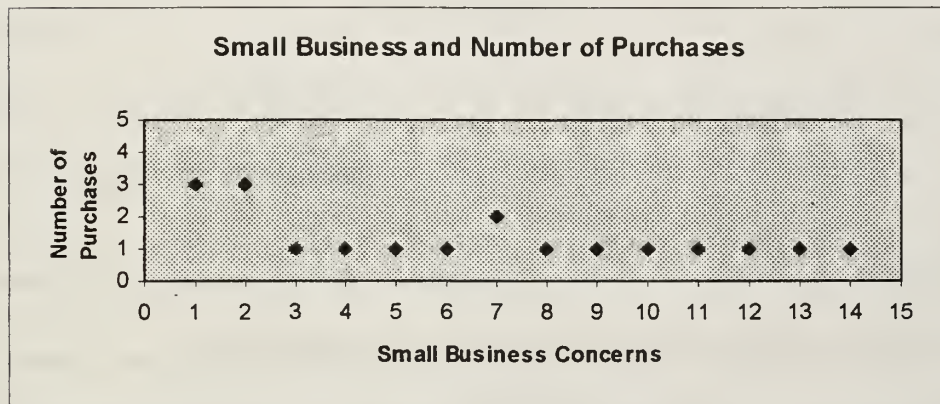


Figure 15. Small Business Concern's Performance

Data on the number of requisitions placed by a requestor was retrieved to determine the business size of the suggested source. For FY 97, 50 micro-purchases were initiated by 24 requestors, and for FY 98, there were 21 requestors. The highest number of requisitions submitted by a single requestor was 6 requisitions for FY 97. Afterwards, the six requisitions were graphed, Figure 16, to illustrate the requestor's buying

preferences. Also considered was the category of requirement being ordered by the requestor, a product or a service i.e. subscriptions and repair.

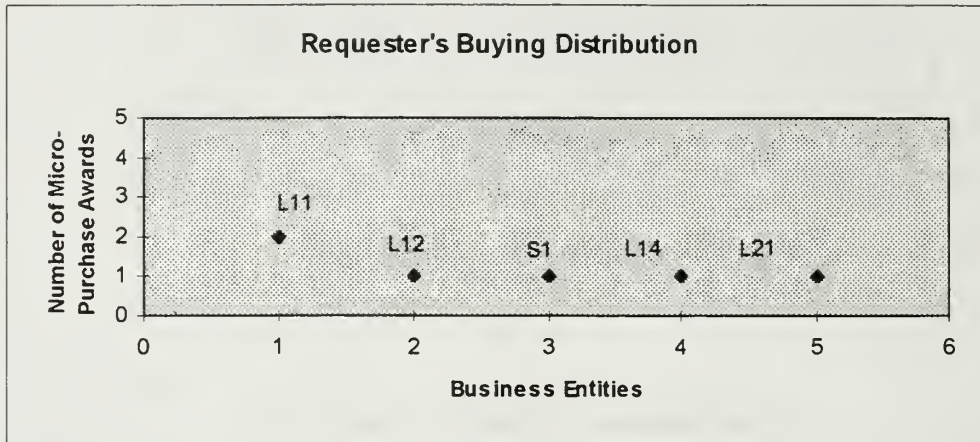


Figure 16. Requestor's Buying Distribution

The graph in Figure 17 shows that there is a high correlation between the requestor's suggested source of supply and the business which received the contract. For FY 97, a perfect 50 out of 50 while in FY 98, 49 out of 50 sources which were initially suggested by the requestor actually received the contract. The deviation in the award process is another source of information which provided more insight in understanding the micro-purchasing transaction.

Figure 18 is a graph for the same data (FY 97) wherein all of the 50 requirements were bought from the requestor's suggested source. If a requirement is obtained from a suggested source, a value of one was given while a value of two was assigned if the cardholder bought the requirement from another source. The graph shows that all data

points have a value of 1 which indicate that the 50 requirements were all bought from the 50 suggested sources.

To illustrate that the requirement is a significant factor which influences the micro-purchase transaction, Figure 19 was developed. Figure 19 graphs the same considerations used in Figure 18 except that the data used is the FY 98. The figure shows that of the 50 requirements stated in FY 98 data, there was one deviation. This indicates that one requirement was not procured from the requestor's suggested source but was still bought by the cardholder. Figure 19 highlights the premise that at the micro-purchase transaction, the cardholder will try to procure the requirement from the suggested source but if unsuccessful, then the cardholder will look for other sources of supply to meet the requestor's need for the requirement.

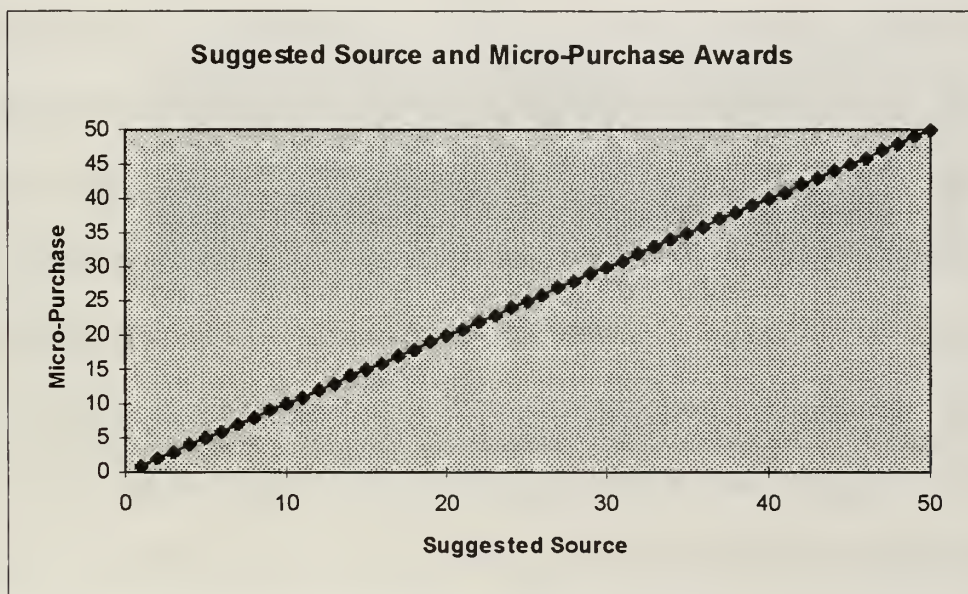


Figure 17. Graph between Suggested Source and Award

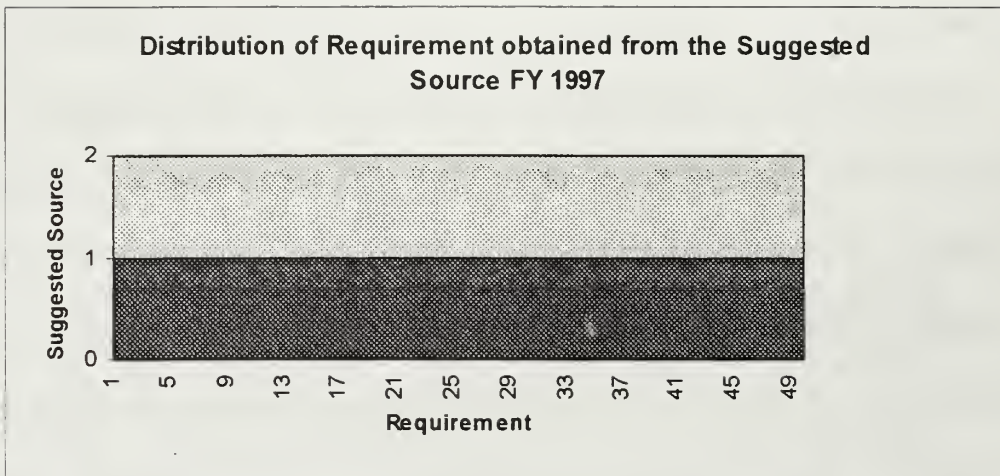


Figure 18. Requirement bought from the Suggested Source FY 1997

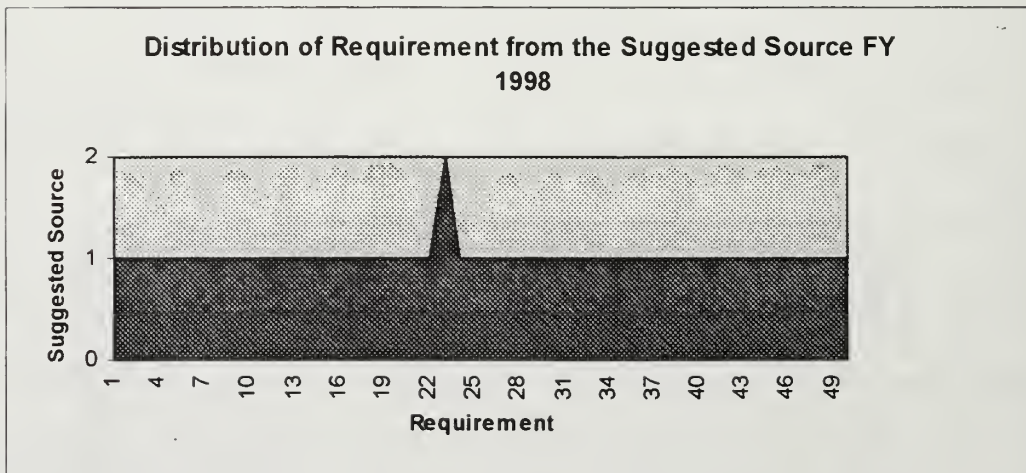


Figure 19. Distribution of Requirement and Suggested Source FY 1998

C. DATA ANALYSIS

The flowchart identified the significant decision makers involved in the micro-purchase and simplified acquisition procedures, namely, the requestor, the cardholder, the SADBUS, and the purchasing agent. The requestor and the cardholder influence the award of the micro-purchase government contract while with the small business set-aside procedure, the SADBUS and the purchasing agent are directly involved in the process. A significant but transparent factor which influences the award at the small business set-aside procedure is the unpredictability of competition. Competition might come from local small business concerns or from all over the United States specifically if the requirement is going to be solicited through electronic data interchange like FACNET.

With no competition requirement at the micro-purchase threshold, the cardholder will almost always buy the requirement from a source which sells the requirement at a reasonable price. The cardholder does not need to look for a possible source of supply since, as part of the required documentation, the requestor identifies a suggested source for where the desired product can be bought. Depending on the level of purchasing know how or commodity expertise of the cardholder and to facilitate the procurement process, the cardholder usually buys the requirement from the source suggested by the requestor.

The data show a distinct and clear relationship between the requestor's suggested source and the business entity which ultimately received the award. Figure 17 illustrates a 45 degree line indicating that there was a high correlation between what the requestor suggested as the possible source and where the cardholder bought the requirement.

Figure 18 is another graph which uses the same data in Figure 17 and shows that the cardholder bought the requirement from the requestor's suggested source. This relationship is predictable at the micro-purchase threshold since competition and other procurement regulations were eliminated to make micro-purchasing faster and more responsive to customer needs. Also, buying from several business entities satisfies the micro-purchase requirement of rotating sources of supply (FAR 13). Given that the cardholder is generally not a commodity expert, it is likely that greater reliance is placed on the requestor's suggested source. Another benefit to the cardholder when buying from the suggested source is that the requestor is more satisfied since the product that will be ordered is what the requestor personally identified in the requisition document that he filled out.

The data in Figure 19 showed that there was one instance when the cardholder did not buy from the suggested source. The cardholder stated that this occurred only because the suggested source or company did not answer the cardholder's phone call and solicitation (Waskow, 1997). In this instance, to meet the requirement, the cardholder called another company that the cardholder felt could perform and deliver the requirement. Her actions were transparent to the requestor since the requestor was not aware that the requirement he eventually received was not bought from the suggested source. The requestor received the same product, even though, the cardholder used another source of supply.

Both cardholders who were interviewed gave the following reasons for why the suggested source might not receive the micro-purchase award:

- The price quoted was unreasonably high;
- The suggested source would not accept the IMPAC card;
- The poor quality of service on previous transaction; and
- Item not in stock.

Both cardholders also maintained a list of companies that they solicit when the suggested source is not able to deliver. One company was mentioned by both cardholders. When the author inquired if the company was a small business concern or a large business entity, one cardholder was not even aware of the size of the business. She stated that this company gained her confidence through a reputation built on competitive prices, an enthusiastic response and an outstanding delivery record. She claimed that whenever she calls this company, that whoever receives the solicitation makes every effort to meet the short-fused requirement and always delivered the required product in a timely fashion. Both cardholders were delighted by the company's performance in delivering urgent requirements. Coincidentally, the business that these two cardholders hold in such high regard is a small business concern.

Figure 13 shows randomly distributed data points which indicate that 31 of the 39 business entities received one micro-purchase award from the cardholder. There is no discernible trend that indicates a pattern. The business entities were further separated according to business size, the large and the small business concerns. As expected,

Figures 14 and 15 did not show a distinct relationship between the size of the business and the award it received. Further analysis of the data was performed by looking at the requestor's buying preference. The requestor who submitted the most requirements was identified and his buying preferences tracked. Figure 16 showed the requestor's buying distribution. Again, the graph does not show any relationship on the number of awards. The researcher investigated further by comparing other requestors buying preferences which yielded the same results, that is, no observable trend in their buying tendencies. The researcher also found that the products were all computer related equipment which were obtained from different sources of supply.

What is clear from the data is that the government is buying from a variety of business sources. Government business is being spread around throughout the market place and that the large business sector is receiving more government business compared to the small business concerns. The data showed that 64 percent of the micro-purchases went to the large business sector (25 large business entities out of 39 business sources) while the small business concern received 36 percent (14 small business concerns out of 39 business sources). Regarding the distribution of the contracts per business entity, the large business sector on average was awarded 1.24 contracts per entity (31 contracts out of 25 large business entities) compared to 1.37 contract per entity for the small business concern (19 award out of 14 small business concerns). The only consistency that can be determined from the data is that no single business entity has a monopoly on government

contracts. At the micro-purchase level, the government can easily buy the requirement from any business entity.

A closer observation of the data shown in Figure 11 and Figure 12 revealed that the suggested source and the requirement information are identical. Further analysis and using the flowchart as a reference showed that the requirement is the most influential factor in the procurement process. The requestor's only concern is getting the product that meets his need. Figure 19 exemplifies this observation. The requestor is not concerned with where the product is procured, that is, it does not matter to the requestor whether the requirement is purchased from a large or a small business concern. Since the requestor's main concern is possessing the product, how the requestor obtains the product information was determined and investigated. Again, interviews with some of the requestors identified the following sources:

- The cardholder and the purchasing office;
- Marketing brochures;
- A colleague who is familiar with the product;
- Media like newspapers, television, Internet; and
- Trade publications and other journals.

A requestor who understands the intricacies of the government procurement process will receive his requirements much sooner than an uninformed requestor. The informed requestor utilizes all available resource information. In many instances, the requestor taps the cardholder's expertise when making a micro-purchase requisition. In

turn, the cardholder can direct the requestor to an appropriate business establishment which can provide the needed product or service. Understandably, the cardholder is likely to exclude business entities that have proven to be a problem.

There are three major influences upon where a product is purchased: the requirement, the requestor, and the cardholder. Understanding this, the business establishment can develop and tailor its commercial and marketing strategies to increase its likelihood of receiving more government contracts. The data illustrated that the requirement and the requestor are the primary factors which influence the micro-purchasing transaction and that the cardholder's affect is relatively insignificant. Which makes any one within the activity a potential customer. Additionally, targeting both the requestors and the cardholders as potential sources for purchase opportunities is not the most productive use of scarce resources, especially for the small business concern. Therefore, basic marketing strategies like product differentiation and low cost leadership are very appropriate and still cost-effective in their present situation.

In a highly competitive free market system, prudent business establishments need to distinguish and separate themselves from the rest of the competition. Astute small business concerns realize that they can not be the low cost leader and that the product they sell is the same as the other business entities sell. To be competitive, the small business concern or any business for that matter must have a reasonable pricing structure. A price which is high in comparison to prices of other like products will drive the buying public away while charging a price which is too low to recover costs and provide a reasonable

margin might jeopardize the business' financial well-being. Another business strategy which is consistent with what the data and the cardholders' viewpoints is the quality of service that the business provides. Both cardholders gave credence to the business entity which has proven itself in meeting requirements, the service provided to the cardholder. The cardholders are confident that these efficient business entities will always be responsive to their demands. Their solid business reputation is built on performance which translates to more government business since cardholders are willing to solicit their service.

Reasonable pricing structure and outstanding service are the most basic of marketing strategies. Understanding what the customer needs and applying technology to meet their needs are other strategies pursued in the business community. All business establishments attempt to adhere to these principles, the difference lies in their individual commitment. Successful business entities perform these activities well, while the unsuccessful ones are barely surviving in the business. Only those large or small business concerns which are totally committed in these market orientation principles will flourish in a competitive free market economy. Mr. Gene Iantorno, a small business owner in the Monterey Peninsula simply summed his successful business strategy "Sensitivity to quality and compassion to customers." He achieved his solid reputation in the car repair industry by focusing on the notion that "good business people focus on quality" (Iantorno, 1997).

D. SUMMARY

This chapter illustrated and discussed the procurement procedures under the micro-purchase and simplified acquisition processes. Data was collected to gain insight on how micro-purchases are awarded and understand the cardholder's decision-making process in determining which business entity receives the award. At the micro-purchase level, the requirement identified by the requestor is the significant driving factor in the transaction. As such, the requestor exerts more influence than the cardholder under micro-purchase procedures. The purchasing data was analyzed only at the micro-purchase level. The same data is not applicable to the small business set aside procedure. Instead, a qualitative assessment of the small business set-aside procedure was performed. At the small business set aside threshold, competition among small business concerns dictated the winner of the government contract. The following chapter will discuss the conclusions and recommendations of this research. The recommendations will provide the baseline for the marketing strategies which can be pursued by the business establishment to obtain government contracts.

V. CONCLUSIONS AND RECOMMENDATIONS

This research evaluated the effect of acquisition reform, specifically the Federal Acquisition Streamlining Act of 1994 and the Government Purchase Card on the small business establishment. The research analyzed the processes involved in the micro-purchase and the small business set-aside procedures under the Simplified Acquisition Threshold to understand how government contracts are awarded to the business establishment. Specific emphasis was placed on determining the effect of acquisition reform on the small business establishment and what business strategies a small business concern can employ under these conditions. This chapter presents the conclusions, provides recommendations, answers the thesis questions and identifies areas for further research.

A. CONCLUSIONS

Acquisition reform initiatives continue to re-engineer the federal procurement process. FASA of 1994 and the IMPAC card program altered the way the government buys its goods and services to make it more responsive to customer demands. Both have made government procurement of goods and services less regulated, easier to perform, brought competition into the micro-purchase market and increased customer satisfaction.

1. The IMPAC card is now mandated as the primary micro-purchase simplified procurement method. The majority of government transactions are handled through the IMPAC card. The use of the IMPAC card within the federal government will

continue to rise. More government agencies will join the Army and the Navy in widespread use of the credit card. As well, the benefits and cost savings realized in the utilization of the card will continue to rise.

2. At the micro-purchase threshold, the requirement is the most influential determinant in the purchasing decision. Though it seldom happens, the cardholder will search for another source of supply, only when the requirement is not available from the suggested source of supply listed by the requestor. The relative size of the business is not a major consideration for the cardholder when making the purchasing decision. Therefore, the small business concern should not place emphasis marketing their products to the cardholder. Instead, their marketing efforts should focus on product differentiation and timely delivery of quality service.

3. FASA allowed the large business entity to compete with the small business concern at the micro-purchase threshold. As expected, the research found that the large business sector has penetrated the market initially reserved for the small business concern. Collectively, sixty-two percent of micro-purchase transactions went to the large business sector. Individually, the large business entity did not fare as well as the small business concern. The researcher concludes that at the micro-purchase level, business size is not a significant consideration in the purchasing decision and is consistent with conclusion 2.

4. The government continues to support the small business establishment. The small business programs like the SADBUS and the small business set-aside reservation are still enforced within the federal agencies. Even, the civilian Prime

Contractors are required to allocate a portion of their government business to the small business establishment. Government contracting activities are holding small business conferences, procurement fairs and regional workshops to interface and assist the area business establishment, specifically the small business concerns in the local community.

5. Both government and commercial businesses are moving on to the information highway. Business entities must access the Internet to keep current on government regulations, commercial and business practices. The Internet is making this information available to everybody and it is free. Government transactions are performed through electronic commerce like FACNET. The small business concern needs to keep abreast with dynamic changes in market conditions.

B. RECOMMENDATIONS

Only efficient business entities will survive a free market economy. With limited resources, the small business concern must effectively and skillfully apply its limited resources in its search for business. The application of appropriately tailored business and marketing strategies will position the small business concern to avail itself of opportunities to do business with the government.

1. Marketing Principles

The application of sound marketing principles by a small business concern is now more critical and as relevant as it ever was. In today's competitive market, the small business concern should realize that their survival depends on the quality of their product, service delivery, and their responsiveness to customer needs. The small business concern

should determine and fill what the commercial or federal market needs with a quality product and service. They should find and match the customer's requirements. In government business, the small business concern should contact the contracting activity's SADBUS for marketing information. The small business concern should remember cardholders and requestors, like any other informed consumers will only seek reputable business entities. Overall, the small business concern needs to build a credible business reputation through product differentiation, expedient delivery and outstanding customer service. Commitment to these principles usually spells success in any business enterprise, whether it be in government or the private sector. Therefore, the small business concern must adhere and practice these principles.

2. The Government as a Customer

The federal government should be treated like any other potential source of business similar to any establishment in the private sector. The government is not a guarantor for the amount of business a small business concern seeks. The government seeks the best value for its investments and advocates competition between sources of supply to achieve this goal. The small business concern must accept that when the government distributes and allocates business to the small business establishment that it seeks to support the whole small business establishment and not just one particular small business concern. Government business is intended to be shared by all. To receive a share, the small business establishment must satisfy the government's best value requirement.

3. IMPAC Card

To be successful, the small business concern must position itself to accept the IMPAC card when desiring to conduct business with the government. In the commercial sector, the use of a credit card is already an accepted way of doing business. The government is no different than a regular consumer for they buy goods and services which are available in the market. By accepting the IMPAC card, the small business concern improves its position to receive government business since micro-purchases now encompass a majority of government contracting transactions. Also, accepting the IMPAC equates to immediate receipt of payment on goods sold to the government.

4. Internet

The small business concern must be able to exploit the Internet. Business entities should keep abreast of changing government regulations and business practices. Commercial and government transactions are moving on-line. The Internet provides immediate access to information which the small business concern can tailor to address impending business transformations.

C. ANSWERS TO RESEARCH QUESTIONS

1. Primary Research Question. What strategies must a small business concern develop to receive government contracts? First and foremost, the small business concern needs to be able to accept the IMPAC card. Secondly, apply sound marketing principles in their search for government contracts. If targeting the government as a potential source

of business, the small business concern must know what the particular federal agency buys and determine if the products or services they market meet the agency's requirement. A critical resource for information is the SADBUS. The small business concern should attend small business' procurement fair and regional seminars to be familiar with present government business practices and have the opportunity to interface with cardholders and end users.

2. Subsidiary Research Question 1. What is the effect of the Federal Acquisition Streamlining Act (FASA) of 1994 and its initiatives, specifically the Government Purchase Card on the small business establishment? At the micro-purchase threshold, FASA allowed the large business entity to compete evenly with the small business concern and made the Government Purchase Card as the primary micro-purchase acquisition procedure. The entry of the large business sector has taken some of the government business initially reserved for the small business concern. As shown in the data (FY 97), the large business sector received 62 percent of the government contracts. That is substantial considering that prior to FASA, all of these requirements would have gone to the small business concern.

Subsidiary Question 2. What is the best way to match the cardholders and the small business establishment? It is probably a mistake for the small business concern to focus their marketing efforts entirely on the cardholder. Under micro-purchase transactions, the requestor has much more influence than the cardholder. Since the pool

of requestors is much more larger than the pool of cardholders, it may not be cost-effective to attempt to gain information on particular requestors.

The author recommends that the small business concern contact the SADBUS in the contracting activity. The SADBUS is an information resource who can be tapped to minimize their marketing costs. The SADBUS' strategic location within the activity provides insight on the activity's mission-based requirements and buying tendencies. By directing their marketing efforts to the SADBUS, the small business concern will find that it is more cost-effective than going after every cardholder or requestor in a command who might not even buy what the small business concern sells.

Subsidiary Question 3. What steps can the government take to enable the small business establishment the opportunity to bid on government contracts? The author believes that the government is providing the small business establishment considerable opportunities to bid on government contracts. Government agencies like the Small Business Administration (SBA) exist to primarily assist the small business concern. Assistance programs like the small business reservation, agency websites, regional workshops, and procurement fairs abound for the small business concern. With all of these agencies and programs available for their use, the small business concern, in turn, should actively search and realistically develop business strategies which can improve their chances of winning more government contracts. The small business concern should regard the government as one of a number of potential customers and not as their primary

source of business. The government is no longer in the position of bestowing contracts to the small business concerns as entitlements.

D. AREAS FOR FURTHER RESEARCH

There are other areas for further research affected by the Federal Acquisition Streamlining Act (FASA) of 1994 and the IMPAC card program on the small business establishment and the government itself. These include:

1. What is the effect of the IMPAC card and the extension of the purchasing function to the Supply department's functional and manpower organization? Has there been a reduction in Supply personnel since program implementation?
2. What percentage of the small business establishment conducts business with the government? Do they consider the government just like another business establishment? Or why does that small business concern expects the government to patronize its business?
3. What are the characteristics of a small business concern which actively solicits government contracts at the small business reservation, specifically, through FACNET. Why is FACNET a wise investment for that small business concern?

APPENDICES

APPENDIX A. DEFINITIONS

Cardholder - any individual within the organization who is authorized to procure goods and services at certain purchasing limits. A cardholder can be a procurement or non-procurement personnel.

CBD - Commerce Business Daily, the government's official means of notifying the public on procurements that are valued at \$25,000 or more. Available in printed form and is accessible through the Internet.

FACNET - all electronic means of doing business with the federal government.

FOIA - Freedom of Information Act . The FOIA enables individuals to secure records from a Federal Agency unless the information is protected from release by certain exemptions.

IMPAC - International Merchant Purchase Authorization Card, the official government purchase card. Referred to as IMPAC, the credit card or simply the card.

Internet - the information highway, a global information system.

Micro-Purchase - an acquisition of commercially available goods or services with a total purchase cost not exceeding \$2,500.

RMBCS - Rocky Mountain Bank Card Service , a subsidiary of First National Bank, Denver, Colorado, the financial institution which issues the VISA cards and maintains all credit accounts.

SADBUS- Small and Disadvantaged Business Utilization Specialist, the contracting agency's small business establishment's advocate. Also acts as the competition advocate.

SAT - Simplified Acquisition Threshold, spending limit of commercially available goods or services with a total purchase cost not exceeding of \$100,000.

Small Business Set-Aside- an acquisition of commercially available goods and services between \$2,500 and \$100,000 exclusively reserved to the small business establishment.

APPENDIX B. ACRONYMS

BPA - Blanket Purchase Agreement

DFARS - Defense Federal Acquisition Regulation Supplement

DoD - Department of Defense

DoN - Department of Navy

FACNET - Federal Acquisition Computer Network

FAR - Federal Acquisition Regulation

FASA - Federal Acquisition Streamlining Act

FOIA - Freedom of Information Act

FY - Fiscal Year

GAO - General Accounting Office

GSA - General Services Administration

IMPAC - International Merchant Purchase Authorization Card

IT - Information Technology

NAVSUP - Naval Supply Systems Command

NPR - National Performance Review

OMB - Office of Management and Budget

SADBUS - Small and Disadvantaged Business Utilization Specialist

SAP - Simplified Acquisition Procedures

SAT - Simplified Acquisition Threshold

SBA - Small Business Administration

APPENDIX C. QUESTIONS TO CARDHOLDERS

1. Do you usually buy the requirement from the suggested source of supply?

2. When do you not buy from the suggested source of supply?

3. What are the qualities of the business entities that you go to when the requirement is not available from the suggested source?

4. Do you pay particular attention to the size of business when placing a micro-purchase transaction?

5. How should the small establishment get in touch with you, the cardholder?

APPENDIX D. FISCAL YEAR 1997 MICRO-PURCHASE DATA

	Size	Award
1	S1	3
2	S2	3
3	L1	1
4	L2	1
5	L3	1
6	S3	1
7	S4	1
8	L4	2
9	S5	1
10	L5	1
11	L6	1
12	L7	1
13	L8	1
14	L9	1
15	L10	1
16	L11	2
17	L12	1
18	13	2
19	14	2
20	L15	1
21	L16	2
22	L17	1
23	S6	1
24	L18	1
25	S7	2
26	L19	1
27	S8	1
28	L20	2
29	L21	1
30	L22	1
31	S9	1
32	L23	1
33	L24	1
34	S10	1
35	S11	1
36	S12	1
37	S13	1
38	S14	1
39	L25	1

Requestor	Size	Award
A	Business	2
	L12	1
	S1	1
	L14	1
	L21	1

Requestor	Size	Award
B	L6	1
	S2	1
	S7	1
	S12	1
	L19	1

Requirement	Suggested Source	Deviation
50	50	1

APPENDIX E. FISCAL YEAR 1998 MICRO-PURCHASE DATA

Business	Size	Award
1	S1	2
2	L1	1
3	L2	1
4	S2	1
5	L3	1
6	S3	1
7	L4	2
8	L5	1
9	L6	4
10	L7	2
11	S4	1
12	L8	1
13	S5	1
14	L9	3
15	L10	2
16	L11	1
17	S6	1
18	L12	1
19	L13	1
20	L14	1
21	L15	1
22	L16	2
23	L17	1
24	L18	1
25	S7	1
26	L19	1
27	S8	1
28	S9	1
29	L20	1
30	S10	1
31	L21	1
32	L22	1
33	S11	1
34	S12	1
35	L23	1
36	S13	1
37	L24	1
38	S14	1
39	L25	1
40	S15	1

Requestor	Size	Award
A	S1	1
	L4	2
	L9	1
	L13	1
	L21	1
	L22	1
	S15	1

Requestor	Size	Award
B	L1	1
	S2	1
	L3	1
	L17	1
	L18	1
	L19	1
	S9	1

	Suggested	
Requirement	Source	Deviation
50	49	1

LIST OF REFERENCES

Arnet Homepage, www.arnet/References/Policy_Letters/Exec_Order_12931.html, Presidential Documents: Title 3-Executive Order 12931 of October 13, 1994, September 29, 1997.

Baldino, J. and P. Mitchell, Interview with the researcher, Code N41 , Naval Postgraduate School, Monterey, CA, August 13, 1997.

Copeland, B., Interview with the researcher, Code EC, Naval Postgraduate School, Monterey, CA, November 22, 1997.

Federal Acquisition Regulation Part 13, Simplified Acquisition Procedures.

Federal Acquisition Regulation, Part 19, Small Business Programs.

General Accounting Office (GAO) Report, DoD's Efforts to Streamline Its Acquisition System and Reduce Personnel, Document Number GAO/NSIAD 90-21, Washington , DC GAO, November 1990.

GSA Homepage, www.gsa.gov/impac/, IMPAC Card Program, General Services Administration, November 3, 1997.

Iantorno, G., Interview with the researcher, Gene's Import Auto Shop, Sand City, CA, November 18, 1997.

Laurent, A., "Sudden Impact" Government Executive, Vol. 29 No. 9, pp. 31-36, Washington, DC, September 1997.

NASA Homepage, www.procure.msfc.nasa.gov/sat.html/, Federal Acquisition Streamlining Act (FASA) of 1994 and Simplified Acquisition Threshold (SAT) Acquisitions, July 19, 1997.

National Performance Review Report, Creating a Government That Works Better and Costs Less, pp. 3, U.S. Government Printing Office, December 1993.

NAVSUPINST 4200.85C, DoN Simplified Acquisition Procedures, Naval Supply Systems Command, Washington, DC, September 18, 1995

RMBCS, "United States Government wide Credit Card Program," A Management Overview, pp. 2, Brochure published by Rocky Mountain Bank Card System, undated.

Robinson, M., Interview with the researcher, Code 36, Naval Postgraduate School, Monterey, CA, December 5, 1997.

Shoop, T., "The Casino Contract" Government Executive, Vol. 27 No. 8, pp. 20, Washington DC, August 1995.

Sidereal Homepage, www.207.96.78.4/facnetfacts.htm, The Facts About FACNET, Sidereal Corporation. July 12, 1997.

Slater, R.S. "An Analysis of Credit Card Use as a Method for Making Small Purchases in the United States Marine Corps" master's thesis, Naval Postgraduate School, pp. 12 - 14, Monterey, CA, December 1994.

Sullivan, Mike RADM, "Doing Business With the Navy," Brief given at the Small Business Conference, Monterey, CA, August 14, 1997.

Swain, A. W., "What are the Costs and Benefits Associated With the Implementation of the Credit Card Program?" master's thesis, Naval Postgraduate School, pp. 29, Monterey, CA, June 1992.

Waskow, K., Interview with the researcher, Code N41, Naval Postgraduate School, Monterey, CA, October 23, 1997.

Young, E., Interview with the researcher, Code 36, Naval Postgraduate School, Monterey, CA, December 5, 1997.

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Department of Systems Management
Naval Postgraduate School
Monterey, California 93943-5004

5. CAPT John Mutty, Code SM/Mu1
Department of Systems Management
Naval Postgraduate School
Monterey, California 93943-5004

6. Shirley Linzer, Code 411
Purchase Card Agency Program Coordinator
Naval Postgraduate School
21 University Circle
Monterey, California 93943

7. Col. Harold Hagans1
Office of the Secretary of Defense
Office of Small and Disadvantaged Business Utilization
Pentagon Room 2A338
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